Student's Journal of Health Research Africa
Vol. 4 No. 12 (2023): December 2023 Issue
https://doi.org/10.51168/sjhrafrica.v4i12.732
Original article

A CROSS-SECTIONAL ANALYSIS UNCOVERING THE PREVALENCE OF HEALTH FACILITY DELIVERIES AMONG WOMEN OF REPRODUCTIVE AGE IN THE CATCHMENT AREAS OF KALISIZO HOSPITAL, KYOTERA DISTRICT.

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ABSTRACT.

Background.

Health Facility delivery refers to birth that occurs inside a health facility whether private or government. Mothers who had previously given birth at home were 40 times more likely to give birth at home again than those who previously gave birth at a health facility and this is associated with many more maternal deaths and normally end up undocumented. Hence there is a need to increase the prevalence of health facility delivery if the SDG target of reducing maternal mortality is to be achieved. Therefore, this study seeks to assess the prevalence of health facility deliveries among mothers living in the catchment areas of Kalisizo Hospital, Kyotera district, Uganda.

Methodology.

A cross-sectional, mixed methods approach is used to better understand the prevalence of health facility deliveries among women of reproductive age in the catchment areas of Kalisizo Hospital, Kyotera district.

Results.

A total of 303 participants were included in the study analysis. The majority of the women were aged between 20-29 years (53.2%) with a mean age of 26.4 (SD=5.8). The prevalence of health facility deliveries among mothers in the catchment areas of Kalisizo Hospital in Kyotera district was 89.7% (95% CI:88.7-90.6) and 10.3% for non-health facility deliveries (95% CI:9.4-11.1).

Conclusion.

Mother's attendance of ANC during pregnancy, marital status, and mother's gravidity/parity, availability of skilled birth attendants, MCH visits by community health workers, experience of complications during and after labor, set time during labor to the delivery place were significant determinants of health facility deliveries.

Recommendation.

Programs promoting health facility births in similar settings should prioritize boosting ANC attendance, MCH visits by community health workers, improving the experiences of mothers at maternal and antenatal wards, and training health workers to manage emergencies to improve the outcome of delivery.

Keywords: Prevalence, Health Facility Deliveries, Women of Reproductive Age, Catchment, Kyotera District.
Submitted: 2023-10-09 Accepted: 2023-10-15

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BACKGROUND OF THE STUDY.

Health Facility delivery refers to birth inside a health facility whether private or government. The proportion of maternal mortality in Uganda that is attributable to childbirth continues to be high every single day about 15 women die due to childbirth-related causes, yet many are preventable. This is attributed to the lower number of women choosing to have a health facility delivery over the years compared to the middle or developed countries (UBOS,2021).

This low prevalence of only 73% of childbirths in Uganda in 2020 and 64% of subsequent births for the sixth or higher birth order versus the required SDG, WHO, and UNICEF targets of 100% proportion of births attended to by a skilled birth attendant continues to be a point of concern if the country is to achieve the SDG target of 70 maternal deaths per 100,000 livebirths (UBOS, 2021)

(Mukunyaetal.,2019) revealed that mothers who had previously given birth at home were 40 times more likely to give birth at home again than those who previously gave birth at a health facility and this was associated with many more maternal deaths and other risks of pregnancy and childbirth which normally end up undocumented. Hence there is a need to increase the prevalence of health facility delivery if the SDG target of reducing maternal mortality is to be achieved.

This study aims to document the prevalence of health facility deliveries among women of reproductive age in the catchment areas of Kalisizo Hospital, Kyotera district.

METHODOLOGY.

Study design.

A cross-sectional study was used to better understand the factors associated with health facility deliveries among mothers of reproductive age in the catchment areas of Kalisizo Hospital.

Study area

This study was conducted in Kyotera which lies approximately 44 kilometers by road, southwest of Masaka, the largest city in the sub-region.

The district has 13 sub-counties, 66 parishes,334 villages, and 13 government-supported health facilities with an estimated population of Pregnant women (15 - 49 years) at 12,517 as reported in the financial year 2016/2017. The study area for this study was around Kalisizo Hospital which serves about 77,857 people annually both around and within Kyotera district. The estimated expected number of pregnant women attending antenatal care at the health facility is 3,893 for 2022 as seen from the projected 2014 district National Housing Population Census.

From April 2022 to May 2022 the concept research topic development, writing, and defence are made. From August 2022 to May 2023 the research proposal is made and from May to June 2023 the data collection from the field is done. The report writing and compilation is done from June to July of 2023 and finally report defence and report results distribution to concerned authorities was done in July 2023.

Study population.

The study population included all mothers (15-49 years) who had attended antenatal care at Kalisizo Hospital, and delivered a child 0–12 months old (alive or died as a stillbirth/neonate); within the last 1 year before the first day of data collection in Kyotera district.

Sampling Techniques.

The researcher used a two-stage sampling approach; firstly, to identify major villages with mothers who attended antenatal care at the hospital (clusters) in catchment areas of Kalisizo Hospital.

Secondly, with the help of the village health teams, households with a child 0–12 months old before the first day of data collection were listed. If the number of eligible households in a village was more than 30, simple random sampling using computer-generated random numbers was applied to recruit the target number of households. If the number of eligible households was less than 30, a nearby cluster was then annexed. If a household had more than one eligible woman, the one with the youngest child was recruited and interviewed to reduce recall bias.

$$N= \frac{1.96^2 * 0.766\ (1-0.766)}{0.05^2}$$

N=275

Catering for a 10% non-response;

=275*0.1

=27.5

Hence, 303 participants were selected to participate in this study.

Sample Size Determination.

To obtain the sample size for the quantitative study, catchment areas with poor maternal health indicators were selected, and the sample size was calculated using the proportion of deliveries at the hospital. The overall sample size was determined using the Kish Leslie formula for cross-sectional studies with the following assumptions; an alpha (α) of 0.05, a sampling error of 5%, a nonresponse rate of 10%, and a statistically conservative 76.6%proportion of mothers that conduct childbirth delivery at health facility in Uganda (Sserwanja, Mukunya, et al.,2021a)since there was limited published data about Kalisizo hospital child birth delivery service demand. The researcher used a design effect of 2.0 to cater for potential differential clustering by catchment in the villages of the Kalisizo, Kyotera district.

To determine the number of clusters**;**

$$C= \frac{P(1-P)\ D}{S^2 b}$$

Where; C=Number of clusters needed
P=Estimated prevalence of outcome of interest
D=Design Effect
S=Level of precision
B=Estimated number of respondents per cluster

$$C= \frac{0.766(1-0.766)2}{(0.05^2)30}$$

C=4.78

Approximately five clusters will be considered for this study.

Determine the sample size

$$N= \frac{z^2 p(1-p)}{e^2}$$

Where; Z=Standard normal value at α level of significance

P= Estimated prevalence of the health facility childbirth delivery=maximum error the investigator is willing to allow

Furthermore, for the qualitative study, a phenomenological qualitative research approach was used based on the Andersen and Newman Framework for health service utilization model. Mothers' and community's experiences and perspectives on health facility deliveries were captured through focused group discussions to answer the research questions in detail.

Four different groups of participants were selected for the Focused Group discussions as data saturation was reached to gain as much insight and understanding as possible about maternal healthcare services from the community's perspective that is to say;

women of reproductive age (15-49 years) who have given birth in the last year before the date of data collection, members of their social support system, such as their husbands, and close relatives among others who care for them during the time of delivery. Religious and/or community leaders health facility and village health workers.

To ensure the yielding of a wider range of perspectives from various groups of stakeholders, maximum variation sampling schemes were used. Kalisizo Town Council parishes were subdivided into better-performing and low-performing clusters in terms of maternal health service utilization based on routine administrative data obtained from Kyotera district or Kalisizo Town Council health department. Accordingly, two of the study parishes were classified as better-performing, and the other two as slow-performing parishes. In each parish, villages, the smallest administrative unit, were selected based on the feasibility of convening Focused Group Discussion participants and the availability of Village Health Workers in each village.

Lastly, from each village, study participants were recruited with the assistance of Village Health Workers based on pre-set selection criteria that include having lived experiences of maternal health services in the last year, being recognized as influential and motivator of health facility child delivery in the community, and being a community volunteer.

Focus group discussions were used to explore information about the social context and discussions on the differences among participants. The size of the Focused Group Discussion ranged from 6–8 participants to elicit group-level perceptions by facilitating active interaction.

Inclusion Criteria.

All mothers aged 15-49 years who attended antenatal care from Kalisizo Hospital with a child of 0–12 months old (alive or died as a stillbirth/neonate) and have stayed in the community for a minimum of one year and consented to be a respondent in the study.

For the qualitative study, targeted participants who have stayed in the catchment areas of Kalisizo Hospital for a minimum of one year and can listen and communicate in English or Luganda were included in the study after their consent.

Exclusion criteria.

Mothers with an active mental or physical illness, renowned drunkards in the community, and those away from the household for the next 3 days within the study period were excluded from the study. Mothers who are critically ill were excluded. These categories of women in the exclusion criteria were not con consented to because they do not meet the requirements for being consented as those in the inclusion criteria.

Data Collection and Tools.

A structured questionnaire was used to collect quantitative data on mother's social demographics, predisposing, enabling, and need factors for their decisions on health facility delivery.

For qualitative data, a Focus Group Discussion guide developed with reference from the Child Birth Experience Questionnaire was used to further understand respondents' unique responses and opinions on their choice of health facility delivery. The tools were developed in English and translated into Luganda, the local language of the study area. The Luganda questionnaire was then translated into English, and both questionnaire copies were compared for consistency.

Trained research assistants interviewed mothers using the local language paper questionnaire and Focus Discussion Group guide, and recorded responses on the English questionnaires. The questionnaire captured de-identifiable data on the mothers' predisposing, enabling, and need factors associated with health facility deliveries.

Study variables.

Dependent variable.

To assess the factors associated with health facility deliveries the outcome (delivery place) variable was dichotomized into health facility delivery coded as Yes; (1), defined as any birth that occurred inside a health facility, be it private or government and non-facility delivery coded as No; (0); defined as a birth that occurred outside the health facility including at home, with traditional birth attendants or on the way to the health facility for delivery.

Independent variables.

This study hypothesized factors associated with health facility childbirth practices using a conceptual framework influenced by Andersen's behavioral model of health service use.

According to
the conceptual framework, the independent variables were divided into three categories; predisposing factors (socio-demographic factors), enabling factors (e.g., availability of health workers during childbirth), and healthcare needs factors such as MCH visits by community health workers, the experience of a stillbirth among others.

Data Analysis.

Quantitative data management and analysis were carried out using STATA version 14.0 Descriptive statistics were generated for each independent variable. Frequencies and proportions were used to summarize categorical variables, while mean and standard deviation were used to summarize continuous variables.

At the bivariable level, the Pearson Chi-Square (x2) test was used to check the significance of the association between an independent variable and the dependent variable. Statistical significance was obtained using a 95% Confidence Interval (CI) at $p < 0.05$.

To assess the factors associated with health facility deliveries, covariates with a p-value ≤ 0.1 in bivariate analysis and those with biological plausibility were considered in the final model building at the multivariate level.

At a multivariable level, a stepwise modified Poisson regression model was fitted to access the factors associated with health facility childbirth. Multicollinearity among the independent variables was checked using the correlation matrix and a correlation less than 0.4, indicated no multicollinearity among the included independent variables.

The adjusted prevalence ratios (APR) were reported with a 95% confidence interval and variables with a p-value <0.05, were considered as the factors that are statistically significantly associated with health facility childbirth.

Pearson chi-square goodness of fit test was used to determine the goodness of fit of each of the final models and ap-value <0.05 indicated that the model fits the data.

For qualitative data, discussions were audio-taped with the consent of the study participants, and the records were transcribed and translated with pseudonyms attached to each respondent. Using Nvivo 12 data analysis software, themes from the Focused Group Discussions were categorized under "predisposing factors", "enabling factors", and "need factors" to reflect the interviewees' statements. The researcher then discussed emerging categories drawing themes and interpretations based on group consensus.

Both deductive and inductive coding approaches were applied.

Guided by the conceptual framework and the discussion guides, pre-defined initial codes were developed (open coding) before data collection. Then, each code was further analyzed and disaggregated into categories and sub-themes (deductive axial coding). Iteratively, through reading the data, all data was subsequently classified into one of the codes. Additional codes were added while reading the data, categories, and sub-categories that had not been previously identified (inductive approach).

Data was triangulated from responses obtained from Focused Group Discussions to compare them with responses from the different community groups. The categories and the concepts that emerged from the discussions were verified by consistently linking the emerging categories with the data received from the other groups of informants to improve the trustworthiness of the qualitative data analysis. Quotes were used to enhance credibility and substantiate the narrative with participants' own words.

Results were presented using graphs, and tables and reported using both crude and adjusted prevalence ratios at 95% confidence intervals. This formed the basis for the interpretation, conclusion, and recommendations.

Data Quality Control, Validity and Reliability

The instrument was checked for completeness, clarity, and logical sequence and relevant adjustments were made before data collection. Pretesting included 56 participants constituting 10% of the total sample size to make sure the questionnaire was understandable to the research population.

Research assistants were trained on how to administer instruments for the study and the principal investigator supervised the assistants. Data entry was done by research assistants and validated by the researcher for any inconsistencies. Data was analyzed to find out if the research objectives were obtained.

Ethical Consideration.

Before the commencement of the study, ethical approval to conduct this study was sought from the Research Ethics Committee (TASO) under the Uganda National Council for Science and Technology. Before conducting interviews, letters of information were given to participants, and written informed consent was obtained from them. Participants were assured of voluntary participation, confidentiality, anonymity, and freedom to withdraw from the study at any time.

RESULTS.

Socio-demographic and economic characteristics.

A total of 303 participants were included in the study analysis. The majority of the women were aged between 20-29 years (53.2%) with a mean age of 26.4 (SD=5.8). Many were married/living with their partners (75.2%) and resided in Kalisizo rural subcounty (60.2%). Additionally, by ethnicity, the majority (76.9%) were Baganda, had primary education as their highest level of education (48.2%), their household living size ranging between four to five people (43.2%), 63.7% of them had been pregnant more than two times in their lifetime as shown in **Table 1**;

Data Presentation.

Table 1: Socio-demographic and economic characteristics of participants in the catchment areas of Kalisizo Hospital, Kyotera district, Uganda, 2023(n=303).

Variables	Category	Frequency(n)	Percent (%)
Age in years			
	Mean (26.4)	**SD (±5.8)**	
	15-19	**36**	**11.9**
	20-24	**79**	**26.1**
	25-29	**82**	**27.1**
	30-34	**43**	**14.2**
	35-39	**49**	**16.2**
	40-45	**14**	**4.6**
Marital status			
	Cohabiting	**2**	**0.7**
	Married	**228**	**75.2**
	Separate	**1**	**.3**
	Single	**72**	**23.8**

Table 2: Socio-demographic and economic characteristics of participants in the catchment areas of Kalisizo Hospital, Kyotera district, Uganda, 2023(n=303).

Residence			
	Kalisizo Rural Subcounty	**183**	**60.4**
	Kalisizo Town Council	**120**	**39.6**
Ethnicity			
	Muganda	**233**	**76.9**
	Mugishu	**2**	**0.7**
	Munyankole	**48**	**15.8**
	Musoga	**8**	**2.6**
	Mutooro	**7**	**2.3**
	Others	**5**	**1.7**
Education status	**Not educated**	**18**	**5.9**
	Primary education	**146**	**48.2**
	Secondary education	**108**	**35.6**
	Tertiary education	**31**	**10.2**
Mother's house hold living size			
	Mean (5.0)	**SD (3.5)**	
	1-3 people	**110**	**36.3**
	4-5 people	**131**	**43.2**
	6 and above people	**62**	**20.5**
Mother's gravidity	**Mean (3.2)**	**SD (2.6)**	
	1-2 pregnancies	**110**	**36.3**
	3-4 pregnancies	**107**	**35.3**
	5-6 pregnancies	**82**	**27.1**
	Above	**4**	**1.3**
Mother's number of Living children	**Mean (2.2)**	**SD (2.4)**	
	1-2 Children	**133**	**43.9**
	2-3 Children	**83**	**27.4**
	4-5 Children	**79**	**26.1**
	More than 5 children	**8**	**2.6**

Notes:[a]*Others ethnicity; Banyarwanda,*

The prevalence of health facility deliveries among mothers in the catchment areas of Kalisizo hospital in Kyotera district was 89.7% (95%CI:88.7-90.6) and10.3% for non-Health facility deliveries (95%CI:9.4-11.1).

The percentage of health facility deliveries generally increased with age, with higher percentages in older age groups of 20-24(24.1%) and 25-29(22.4%) age groups although age was not statistically associated with health facility delivery. Married/living with their spouse women had more health facility deliveries (68.3%) compared to those living individually apart from their spouses as cohabiting (0.0%), separated (0.3%), and single pregnant women (21.1%). Women with 1-2 pregnancies had the highest percentage of health facility deliveries (33.7%) compared to those with 3 to 4 pregnancies (29.4%).

Furthermore, mothers who had at least one ANC visit for their recent pregnancy were more likely to have health facility deliveries compared to those who did not attend ANC (P=0.045 <0.05). Health facility deliveries were primarily conducted by midwives (67.0%) and doctors (8.9%), while non-health professionals were associated with non-health facility deliveries. Health facility deliveries had a significantly higher percentage of live births (84.2%) and lower percentages of neonatal death (0.7%) and stillbirths (5.0%) compared to on-health facility deliveries. Women who had MCH visits by community health workers at their households were more likely to have health facility deliveries (P =0.000 <0.05) as seen in **Table 3**.

Table 3: Results of the chi-square test and cross tabulation showing the distribution of health facility deliveries by background characteristics.

Characteristics	Health facility delivery N=272 n (%)	Non-Health facility delivery N=31 n (%)	P-Value
Age in years			0.111
15-19	31(10.2%)	5(1.7%)	
20-24	73(24.1%)	6(2.0%)	
25-29	68(22.4%)	14 (4.6%)	
30-34	39(12.9%)	4(1.3%)	
35-39	47(15.5%)	2(0.7%)	
40-45	14 (4.6%)	0(0.0%)	
Marital status			0.000*
Cohabiting	0(0.0%)	2(0.7%)	
Married	207(68.3%)	21 (6.9%)	
Separated	1(0.3%)	0(0.0%)	
Single	64(21.1%)	8(2.6%)	
Ethnicity			0.474
Muganda	207(68.3%)	26(8.6)	
Mugishu	2(0.7%)	0(0.0%)	
Munyankole	45(14.9%)	3(1.0%)	
Musoga	6(2.0%)	2(0.7%)	
Mutooro	7(2.3%)	0(0.0%)	
Others	5(1.7%)	0(0.0%)	

Table 4: Results of the chi-square test and cross tabulation showing the distribution of health facility deliveries by background characteristics.

Mother's education status			0.117
Not educated	18 (5.9%)	0(0.0%)	
Primary education	134(44.2%)	12 (4.0%)	
Secondary education	95(31.4%)	13 (4.3%)	
Tertiary education	25 (8.3%)	6(2.0%)	
Mother's household living size			0.210
1-3 people	102(33.7%)	8(2.6%)	
4-5 people	113(37.3%)	18 (5.9%)	
6 and above people	57(18.8%)	5(1.7%)	
Mother's gravidity			0.044*
1-2 pregnancies	102(33.7%)	8(2.6%)	
3-4 pregnancies	89(29.4%)	18 (5.9%)	
5-6 pregnancies	77(25.4%)	5(1.7%)	
Above	4(1.3%)	0(0.0%)	
Mother's number of living children			0.407
1-2 Children	121(39.9%)	12 (4.0%)	
2-3 Children	71(23.4%)	12 (4.0%)	
4-5 Children	72(23.8%)	7(2.3%)	
More than 5 children	8(2.6%)	0(0.0%)	
ANC visit at least once for their recent pregnancy			0.045*
Yes	267(88.1%)	31(10.2%)	
No	5(1.7%)	0(0.0%)	
Person who conducted mother's ANC checkup			0.029*
Doctor	27 (8.9%)	8(2.6%)	
Midwife	203(67.0%)	20 (6.6%)	
Nurse	42(13.9%)	3(1.0%)	
Number of antenatal visits			0.057
1-2 visits	34(11.2%)	2(0.7%)	
3-4 visits	130(42.9%)	19 (6.3%)	
5-6 visits	88(29.0%)	6(2.0%)	
7-8 visits	20 (6.6%)	3(1.0%)	
Many more	0(0.0%)	1(0.3%)	

Table 5: Results of the chi-square test and cross tabulation showing the distribution of health facility deliveries by background characteristics.

Time to set off for delivery			0.000*
After a few hours labor pain shad Increased	102(33.7%)	11 (3.6%)	
After a few hours labor pains were Severe and unbearable	15 (5.0%)	9(3.0%)	
Immediately when I felt labor pains	155(51.2%)	11 (3.6%)	
Person who decided where to delivery from			0.204
Herself	106 (35%)	14 (4.6%)	
Husband	21(39.9%)	9(3.0%)	
Relative	45(14.9%)	8(2.6%)	
Person who conducted delivery			0.000*
Doctor	74(24.4%)	3(1.0%)	
Midwife	177(58.4%)	0(0.0%)	
Nurse	20 (6.6%)	0(0.0%)	
Non-health professional	1(0.3%)	28 (9.2%)	
Child delivery experience at your place of delivery			.000*
Yes	227(14.9%)	3(0.3%)	
No	45(14.9%)	28 (9.2%)	
Labor Experience			0.103
Convulsions			
High fever	4(1.3%)	0(0.0%)	
Labor pains which disappear	45(14.9%)	9(3.0%)	
	31(10.2%)	4(1.3%)	
Suddenly			
Didn't experience any Complication	108(35.6%)	10 (3.3%)	
Prolonged labor (more than 12 hours)	39(12.9%)	0(0.0%)	
Severe bleeding	45(14.9%)	8(2.6%)	

Table 6: Results of the chi-square test and cross tabulation showing the distribution of health facility deliveries by background characteristics.

Delays in reaching the delivery site			0.058
Decision making	78(25.7%)	6(2.0%)	
Arranging transport to delivery site	22 (7.3%)	1(0.3%)	
Mobilizing funds	97(32.0%)	19 (6.3%)	
Bad road terrain	75(24.8%)	5(1.7%)	
Outcome of delivery			0.000*
Live birth	255(84.2%)	14 (4.6%)	
Neonatal death	2(0.7%)	9(3.0%)	
Stillbirth	15 (5.0%)	8(2.6%)	
Satisfaction with experience at your delivery site?			0.000*
Yes			
No	239(78.9%)	3(1.0%)	
	33(10.9%)	28 (9.2%)	
Cultural norms and traditional health Beliefs			0.398
Strongly disagree	95(31.4%)	15 (5.0%)	
Disagree	128(42.2%)	12 (4.0%)	
I don't know	30 (9.9%)	4(1.3%)	
Agree	12 (4.0%)	0(0.0%)	
Strongly agree	7(2.3%	0(0.0%)	
Health status of mother			0.083
Strongly disagree	32(10.6)	4(1.3%)	
Disagree	131(43.2%)	8(2.6%)	
I don't know	14 (4.6%)	2(0.7%)	
Agree	79(26.1%)	12 (4.0%)	
Strongly agree	16 (5.3%)	5(1.7%)	
Availability of skilled health workers during and after labor			0.391
Positively	252(83.2%)	30 (9.9%)	
Negatively	20 (6.6%)	1(0.3%)	
Presence of transportation means to the health facility			0.391
Positively			
Negatively	252(83.2%)	30 (9.9%)	
	20 (6.6%)	0(0.0%)	
Presence and knowledge of Support system on maternal healthcare			0.129
Negatively	19 (6.3%)	0(0.0%)	
Positively	253(83.5%)	31(10.2%)	

Table 7: Results of the chi-square test and cross tabulation showing the distribution of health facility deliveries by background characteristics.

Decision maker on house hold expenses and delivery place **Negatively** **Positively**	 21 (6.9%) 251(82.8%)	 1(0.3%) 30 (9.9%)	0.361
Decision maker on house hold expenses and delivery place **Negatively** **Positively**	 21 (6.9%) 251(82.8%)	 1(0.3%) 30 (9.9%)	0.361
Experience of delivery complications **No** **Yes**	 150(55.1%) 122(44.8%)	 4(1.5%) 27 (9.9%)	0.000*
Presence and knowledge of support system for example spouse among others on Maternal health **Negative** **Positive**	 19 (6.3%) 253(83.5%)	 0(0.0%) 31(10.2%)	0.129
Time labor started **Day** **Night**	 117(38.6%) 155(51.2%)	 18 (5.9%) 13(10.2%)	0.110
MCH visits by community health workers at their households **No** **Yes**	 104(34.3%) 168(55.4%)	 30 (9.9%) 1(0.3%)	0.000*
Number of MCH visits by community health workers **0** **1** **2** **3** **4** **5**	 105(34.7%) 15 (5.0%) 34(11.2%) 60(19.8%) 41(13.5%) 17 (5.6%)	 30 (9.9%) 0 (0.0%) 1(0.3%) 0(0.0%) 0(0.0%) 0(0.0%)	0.000*

Table 8: Results of the chi-square test and cross tabulation showing the distribution of health facility deliveries by background characteristics.

Information received on maternal healthcare from community health workers Antenatal care Information on pregnancy/delivery Signs Management of diseases/infections In pregnancy or delivery Place of birth All the above Not on maternal health	 12 (4.0%) 70(23.1%) 2(0.7%) 17 (5.6%) 67(22.1%) 104(34.3%)	 0(0.0%) 1(0.3%) 0(0.0%) 0(0.0%) 0(0.0%) 30 (9.9%)	0.000*

DISCUSSION.

Overall, almost 90% of the mothers had their recent childbirth at a health facility with most of them delivering at Kalisizo Hospital a government health facility. This proportion of health facility deliveries was higher than that in national studies in recent demographic health survey data and other research studies in Uganda (UBOS, 2021), Sserwanja, Mukunya, et al., 2021a.

Qualitative results highlighted mothers attended their first ANC visit in the second trimester. This was a result of them being multiple gravid as, having no complication during pregnancy and thus, presence of prevalence of non-health facility deliveries in their communities.

Mothers who had delayed to set off to go to the health facility for delivery had not had MCH visits by community health workers and those who had not experienced complications had increased prevalence of a non-health facility delivery compared to their counterparts. This finding suggests that they should be included in programs that promote health facility birth as reported in other studies (Horwood et al., 2020; Tesfaye et al.,2019).

The findings of research on the prevalence of health facility deliveries among women of reproductive age in the catchment areas of Kalisizo Hospital, Kyotera district can have broader implications for a larger population in several ways as explained below;

Informing Policy; the research shows that a significant percentage of women in the study area are opting for health facility deliveries, indicating that government or healthcare organizations in the region are implementing effective maternal health policies and programs. This success can serve as a model for scaling up similar programs in neighbouring districts or regions, leading to improved maternal and child health outcomes for a larger population.

Identifying Gaps and Challenges; On the other hand, the research uncovers tendencies of low rates of health facility deliveries, which can shed light on the specific barriers or challenges that are deterring women from accessing healthcare facilities. This information can help policymakers and healthcare providers tailor interventions to address these issues not only in the study area but also in other regions with similar challenges.

Resource Allocation; The research findings can assist in the allocation of resources, such as funding, staff, and infrastructure. If a high prevalence of health facility deliveries is found, it may justify increased investment in healthcare facilities and personnel. Conversely, if the prevalence is low, this could signal the need for additional resources or the redirection of resources to areas where they are more urgently required.

Educational Campaigns; The study's results can guide public health campaigns and educational initiatives aimed at promoting the importance of health facility deliveries among women of reproductive age. Lessons learned from the study can be used to design culturally sensitive and effective campaigns to reach a larger population, potentially leading to an increase in the prevalence of health facility deliveries.

CONCLUSION.

Mother's attendance of ANC during pregnancy, marital status, and mother's gravidity/parity, availability of skilled birth attendants, MCH visits by community health workers, experience of complications during and after labor, set time during labor to the delivery place were significant determinants of health facility deliveries.

Some of the limitations of this study included the information used in this study was based on respondents' voluntary answers and therefore, there was a possibility of recall bias since the study was retrospective. In this cross-sectional mixed study design, the temporal link between the outcome and exposure was not determined since both were examined at the same time hence difficult to infer causality.

RECOMMENDATIONS.

- Programs promoting health facility births in similar settings should prioritize boosting ANC attendance, MCH visits by community health workers, improving the experiences of mothers at maternal and antenatal wards, and training health workers to manage emergencies to improve the outcome of delivery.
- Multi-sector approaches involving poverty eradication and girl child education when addressing issues such as health facility births.

ACKNOWLEDGEMENT.

First of all, I would like to thank Almighty God for giving me the patience, wisdom, knowledge, and strength I needed to compile this research proposal and for always guiding me in every phase of this work.

This proposal was a result of the valuable contribution of the 303 respondents who gave answers to the specifically designed questionnaire.

I appreciate the work done by my supervisor Dr. Sarah Zalwango and Ms. Sandrah Mwima who have guided me throughout this proposal writing journey.

LIST OF ABBREVIATIONS.

ANC: Antenatal care

SDG: Sustainable Developmental Goal

TASO: The AIDs Support Organization

UNFPA: United Nations Population Fund Authority

UBOS: Uganda Bureau of Statistics

UNICEF: United Nations Children's Fund

WHO: World Health Organization

MoH: Ministry of Health

MCH: Maternal Child Health

SOURCE OF FUNDING.

This study was not funded.

CONFLICT OF INTEREST.

The author declares not conflict of interest.

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REFERENCES.

1. Horwood,G.,Opondo, C.,Choudhury, S.S.,Rani,A., &Nair,M.(2020).Riskfactorsformaternalmortalityamong 1.9million women in empower reaction group state in India: secondary analysis of Annual Health Survey data. BMJOpen,10(8),e038910.https://doi.org/10.1136/bmjopen-2020-038910

2. Mukunya, D., Nankabirwa, V., Ndeezi, G., Tumuhamye, J., Tongun, J. B., Kizito, S.,Napyo, A., Achora, V., Odongkara, B., Arach, A. A., Tylleskar, T., & Tumwine, J. K.(2019). Key Decision Makers and Actors in Selected Newborn Care Practices: A Community-Based Survey in Northern Uganda. *International Journal ofEnvironmental Research and Public Health 2019, Vol. 16, Page 1723*, *16*(10), 1723.https://doi.org/10.3390/IJERPH16101723

3. Sserwanja,Q.,Mukunya,D.,Musaba,M.W.,Kawuki,J.,&Kitutu,F.E.(2021a).Factorsassociated with health facility utilization during childbirth among 15 to 49-year-oldwomen in Uganda: evidence from the Uganda demographic health. *Article in BMCHealthServicesResearch*,*21*(1). https://doi.org/10.1186/s12913-021-07179-5

4. Tesfaye, G., Chojenta, C., Smith, R., & Loxton, D. (2019c). Predisposing, enabling and needfactors associated with skilleddeliverycareutilization among reproductive-aged women in Kersa district, eastern Ethiopia. *Reproductive Health*, *16*(1). https://doi.org/10.1186/s12978-019-0

5. UBOS. (2020).*UGANDA BUREAUOFSTATISTICS 2020 STATISTICALABSTRACT*.https://www.ubos.org/wp-content/uploads/publications/11_2020STATISTICALABSTRACT_2020.pdf

6. UBOS. (2021). *UGANDA BUREAU OF STATISTICS INTERNATIONAL WOMENS DAYCELEBRATIONS*. https://www.ubos.org/wpcontent/uploads/2021/03/UBOS-WOMENS-DAY-BROCHURE-2021.pdf

Publisher details.

Publishing Journal: Student's Journal of Health Research Africa.
Email: studentsjournal2020@gmail.com or admin@sjhresearchafrica.org

(ISSN: 2709-9997)

Publisher: SJC Publishers Company Limited
Category: Non-Government & Non-profit Organisation
Contact: +256775434261(WhatsApp)
Email: admin@sjpublisher.org
Website: https://sjpublisher.org
Location: Wisdom Centre Annex, P.O. BOX. 701432 Entebbe, Uganda, East Africa.